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A multi-stakeholder approach

in the city of Tilburg

to execute a new local climate policy

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Fife, Scotland 10 September 2009

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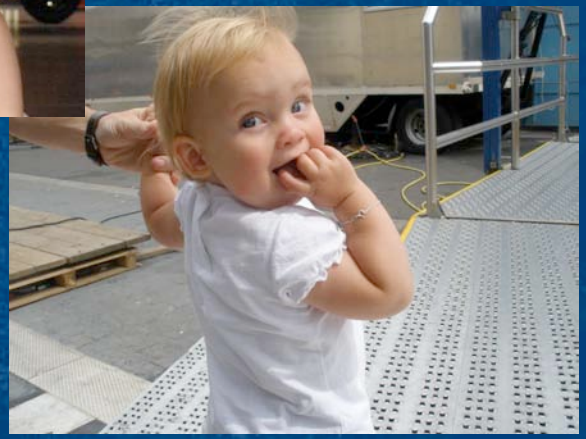
This is my drive ……..



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Outline

- Introduction of the city
- Objectives of the new policy
- Building the new policy
- First experiences
- Lessons learned so far

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Introduction (1)
Tilburg in the Netherlands

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Introduction (2)
Some figures of the city of Tilburg

- Tilburg: 6^{the} city in the Netherlands
- inhabitants: ± 205.000
- municipal employees: 1.850
- yearly account: 903 million Euro (2008)
- a board of 1 mayor and 7 aldermen
- a council of 39 members

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Some achievements

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- Third covenant with SHO
  - Integrate energy theme in strategy policy
  - Large scale energy assessements + energylabel
- Warmth & cold storage in the ground
  - Many projects achieved
  - Tender: infra-structure at a new industrial zone
- Public lightning
  - Dimming at night instead of turning of half of the lanterns
- CNG pump realised
- Projects with PV, LED, etc.

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Objectives

- Develope a climate programme
  - not only mitigation to reduce CO2-emission
  - but also adaptation on a local level
- Develope a "local arrangement"
  - local partners should work together
  - the city is one of the partners
  - everyone on an equal base

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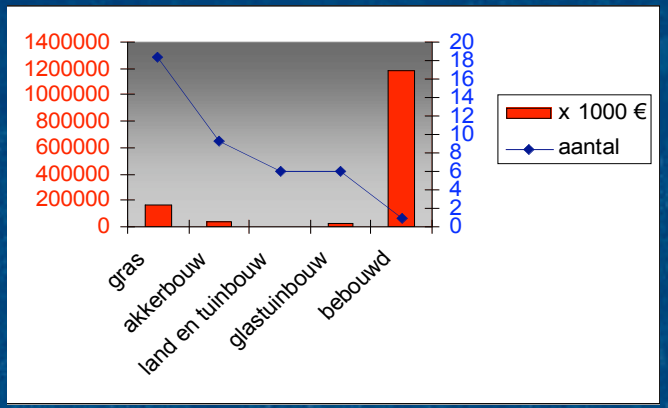
Building a new policy (1)
General plan



- Important studies:
  - CO_2-neutral Tilburg
  - adaptation scan
  - investigation of the benefit of the presence of the district heating system in Tilburg
- Building on local coöporation
  - the "COP"-model
  - based on a joint programme

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Building a new policy (2)
time schedule

Orientation phase

Policy development

Research, investigations, finance, organisation, communication

Decision making

2006 | 2007 | 1e half 2008 | 2008

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Building a new policy (3)

Roadmap to a CO2-neutral Tilburg

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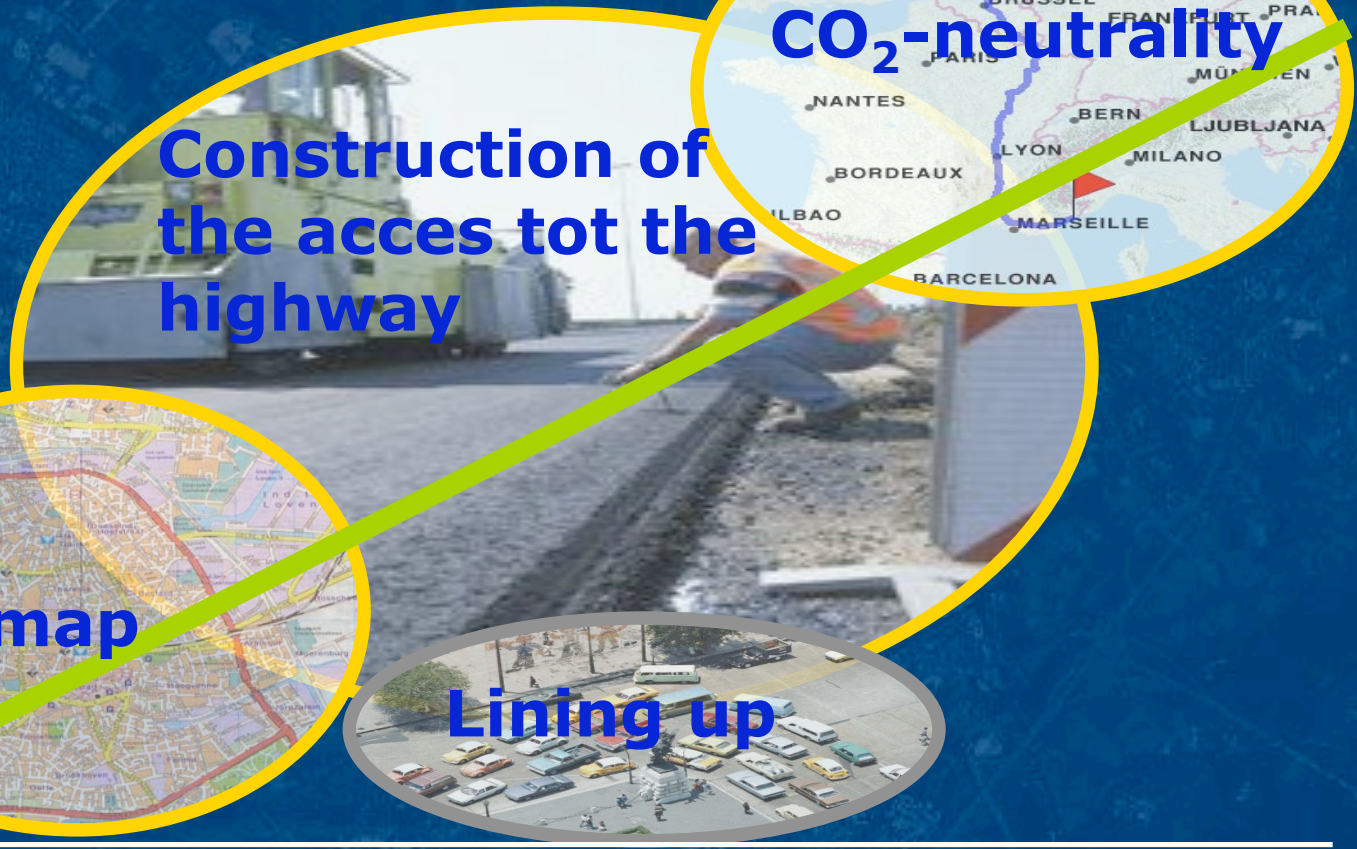

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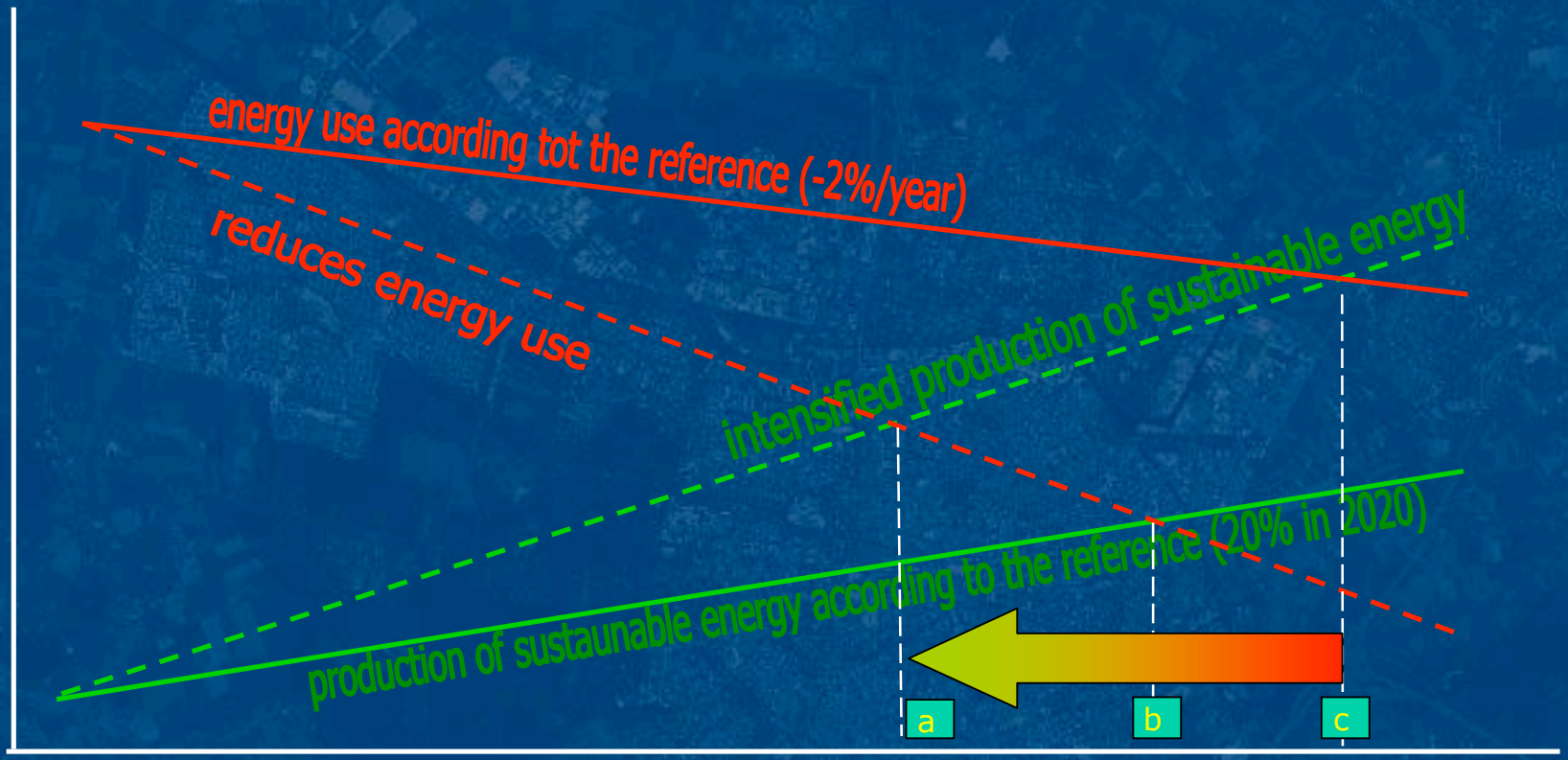
Building a new policy (4)
actions to be taken



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Building a new policy (5)
adaptation scan

- Steps that have been taken:
  - Climate scenario's Tilburg 2050
    (temperature, preciptation, days with extremes, ….)
  - Interviews colleagues (other policy themes)
    (nature, housing, mobility, economics, city planning,..)
  - Lists of chances and threats
  - Effects ranged on importance and urgency
  - Advice per effect to act, investigate, hand over, not act
- Climate programme:
  - 2009-2012: first few adaptation projects
  - For example: investigate nature in the city for cooling

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Building a new policy (6)
local climate scenario's

Mean summer temperature:	0,9°C to 2,9°C warmer
Mean of daily highs:	0,9°C to 2,9°C warmer
Hottest summer day:	1,1°C to 4,3°C warmer
Number of days >25°C:	4,8 to 17,1 extra days (27% to 96% more)
Number of days >30°C:	3,5 tot 10,7 extra days (117% to 356% more)
Mean daily precipitation:	*5% more* to *20% less*
Number of rainy days:	1,7% to 19% more
Maximum amount of precipitation:	3 to 20% more

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Building a new policy (7)
adaptation scan

Limitation navigating ships in canals

Energy of the sun

Chances for recreation

More caterpillars

More cooling

Inconvenience of heated buildings

Higher mortality

Storage of heat

Smog

Inconvenience of heated cities

Forest-fire

Longer growth season

Moving in time of the harvest

Quality of swimmingwater

Expire of species

Less demand of warmth

Artificial ice

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Building a new policy (8)
adaptation scan

Space to store water

Good climate to invest

Developing nature

Accidents & files

Damage on harvests

Storing water

Damage by storm

Water and nature as a cooling and aesthetic element

Overflow sewer

Limitation navigating Ships in canals

Inconvenience of water on roads

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Building a new policy (9)
district heating

- Role of district heating in the transition to CO2-neutrality
  - About 27.500 clients (of which 250 companies)
  - Source: electricity plant (40 km from Tilburg)
  - Still extra fossil fuel needed!!
  - Profit on CO2-reduction now: only about 40% - 50%
- Improving CO2 efficiency:
  - Changing the source
  - For instance: using bio fuel or geo-themic
  - Local bio-project is started

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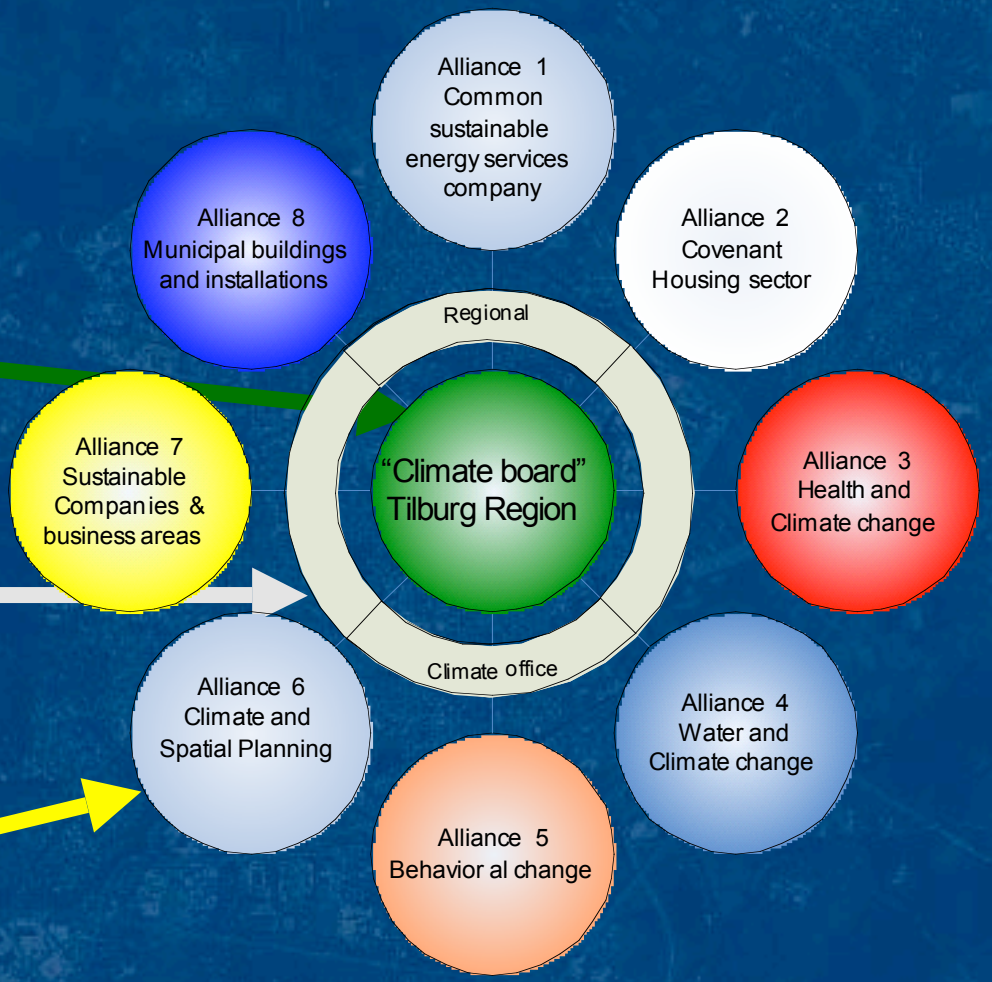
Building a new policy (10)
local arrangement

COP: conference of parties

Organization

Alliances



Organisation scheme of Tilburg "Climate Board" and asociated Climate Alliances

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Building a new policy (11)
local arrangement

- COP (Conference op parties)
  - Once a year a conference
  - Looking to the results
  - More important: looking forward
- Organization (Climate Bureau)
  - Supporting the COP and alliances

Organisation scheme of Tilburg "Climate Board" and associated Climate Alliances

Climate programmes towards 2045

- First programme 2009-2012: city is leading
- Next programmes: COP (local arrangement) is leading
- The city is one of the (equal) partners!
- Important role for alliances in executing the programme

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Building a new policy (12)
local arrangement

- Alliances
  - At the moment : 8 alliances
  - A new alliance: mobility
    - Very difficult theme
    - Important: 30% CO2-emission
    - Not conducted on a local level

Organisation scheme of Tilburg "Climate Board" and asociated Climate Alliances

  - Alliances start to connect, for example:
    - Health, spatial planning, behavior, housing sector
    - Developing adaptation project (heat island): "greening" the small inner streets in the innercity
    - Main problem: thinking in "problems"

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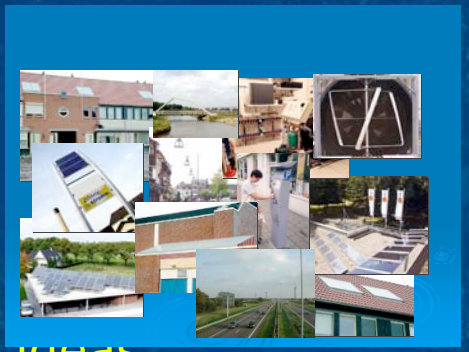
Results so far (1)



- three miniconferences
  - December 2006:
    - mindsetting
  - October 2007:
    - first results studiesgenerating concrete ideas
  - January 2009:
    - agreement on the local climate programme
    - partners sign a declaration
    - formal start of executing the programme
- the local arrangement is developing
- the executing of the climate programme 2009 – 2012 has started

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Results so far (2)

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- Some projects:
  - Mitigation:
    - Reconstruction railwaystation district: C
    - Development new living area: CO2-neutral
    - Windturbines at industrial area
    - Several warmth & cold storages in the ground (no CNG)
  - Adaptation:
    - Investigation on greening railwaystation district
    - Integrating adaptation in urban planning (Rugdijk)
    - Study on greening small streets in the inner city
    - Measurements in case of heat waves (Health Service)
    - Leading water to waterparks outsite the city
    - Study on using water in the city for cooling
    - Study on influence climate change in Green Wood (area between cities of Tilburg, Eindhoven, Den Bosch)

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First experiences (1)

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- Executing the programme
  - Many projects started
  - Integrating the climate theme in the city-organization
  - Colleagues are inviting the "climate colleagues" in an earlier stage
  - Proces versus concrete projects
- Alliances:
  - First half year:
    - Looking for their own role
    - Building a team of the alliance-leaders
    - Alliances / local organizations are starting projects and take new initiatives
    - Local arangement still "under construction"

First experiences (2)

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- Alliances
  - Priorities:
    - Building a Local Sustainable Energy Company
    - Building the COP-organization (Climate Bureau)
    - New approach of energy-saving in existing housing (one of the first results of the COP-approach)
- The city efforts on the climate change issue is more and more known
- As a result of this:
  - Networks expand
  - The city is involved in developing new national climate initiatives

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Factors to keep in mind …

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- Our process:
  - A good consultant
  - Defrayment development proces
  - Progress not depend on one person
  - Broad support (management, board)
  - Communicate open and often
  - Timeschedule with enough flexibility

- More general issues are:
  - Attention internal colleagues
  - Deal with non-concrete projects
  - Politicians don't like study projects
  - National attention works positive

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Conclusions

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- At this moment people take interest in the energy and climate theme
  - It is not only a problem of the local governement
  - It is seen as a common problem
- Reaching the goals still is a very hard job
  - Inside the organization with the colleagues
  - Outside with the partners
- Tilburg is known as a very active city
  - Citizens, organizations and companies apply
  - It helps to generate extra money

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Resposibility of all .....

Thank you

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